The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A rotor ~~motor~~ comprising;

a rotor core having a rotor surface; ~~(2)(12)(32)(42) in which multiple~~

a plurality of permanent magnets ~~(3)(13)(14)(33)(43)(44) are~~ embedded in the rotor core with each of the permanent magnets having a pair of poles, ~~wherein~~

~~a peripheral direction edge section of each of the permanent magnets (3)(13)(14)(33)(43)(44) or~~ a plurality of first non-magnetic layers with one of the first non-magnetic layers being located between each adjacent pairs of the permanent magnets along the rotor surface and being ~~(4)(34)~~ continuous or adjacent to ~~the~~ a peripheral ~~direction~~ edge section of each of the permanent magnets ~~(3)(13)(14)(33)(43)(44) elongates~~ in ~~the~~ a vicinity ~~of~~ between the poles and ~~to the~~ a vicinity of the rotor surface~~,~~; and

a plurality of second non-magnetic layers with one of the second non-magnetic layers being located ~~(5)(35) is provided in the~~ a vicinity of ~~the surface of~~ the rotor surface at ~~the~~ a pole center side position with respect to the peripheral ~~direction~~ edge section of each of the permanent magnets ~~(3)(13)(14)(33)(43)(44)~~ or the first non-magnetic layers, ~~continuous or adjacent to the peripheral direction edge section of each permanent magnet (3)(13)(14)(33)(43)(44), and wherein~~

the first non-magnetic layers ~~(4)(34) continuous or adjacent to the peripheral direction edge section of each permanent magnet~~ and the second non-magnetic layers ~~(5)(35)~~ ~~are~~ being positioned to cancel n-th order harmonics (where n is an odd number and is equal to or greater than 3) of ~~the~~ an induction voltage.

2. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 1, wherein the n-th order harmonics is an odd ~~number~~ numbered order harmonics, the odd number being equal to or greater than 3 and other than multiples of 3.

3. (Currently Amended) The rotor ~~A motor~~ as set forth in claim ~~2~~ 1, wherein the n-th order harmonics is an odd ~~number~~ numbered order harmonics, the odd number being equal to or greater than 13 and other than multiples of 3.

4. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 2, wherein the n-th order harmonics is 5-th order harmonics or 7-th order harmonics.

5. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 4, wherein the peripheral ~~direction~~ edge section of each of the permanent magnets ~~(3)(33)~~ or the first non-magnetic layers ~~(4)(34) continuous or adjacent to the peripheral direction edge section of each permanent magnet~~ and the second non-magnetic layers ~~(5)(35)~~ are ~~made to be~~ independent from one another, and the rotor core ~~(2a)(32a) are~~ is interposed between them.

6. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 4 ~~or claim 5~~, wherein

an angle θ 1 between the peripheral ~~direction~~ edge section of each of the permanent magnets ~~(3)~~ or ~~the~~ a pole center side edge section of the rotor surface adjacent ~~section of~~ each of the first non-magnetic layers ~~(4) continuous or adjacent to the peripheral direction edge section of each permanent magnet (3)~~ and ~~between~~ the poles, and an angle θ 2 between the pole center side edge section of the rotor surface adjacent ~~section~~ each of the second non-magnetic layers ~~(5)~~ and the ~~between~~ poles, are determined to be

$0 < \theta 1 < 180/(5 \cdot Pn)$ and $180/(5 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(5 \cdot Pn)$

or

$0 < \theta 1 < 180/(7 \cdot Pn)$ and $180/(7 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(7 \cdot Pn)$

where a pole pair number is Pn.

7. (Currently Amended) The rotor ~~A motor~~ as set forth in claim ~~4 or claim 5~~ 6, wherein

the angle $\theta 1$ is $0 < \theta 1 < 180/(5 \cdot Pn)$ or $0 < \theta 1 < 180/(7 \cdot Pn)$, the angle $\theta 2$ is the minimum value of $180/(5 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(5 \cdot Pn)$ or the minimum value of $180/(7 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(7 \cdot Pn)$.

8. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 4 ~~or claim 5~~, wherein

an angle $\theta 5$ between the peripheral ~~direction~~ edge section of each of the permanent magnets ~~(33)~~ or ~~the~~ a pole center side edge section of the rotor surface adjacent ~~section~~ each of the first non-magnetic layers ~~(34) continuous or adjacent to the peripheral direction edge section of each permanent magnet (33)~~ and ~~the between~~ the poles, and an angle $\theta 6$ between the pole center side edge section of the rotor surface adjacent ~~section~~ each of the second non-magnetic layers ~~(35)~~ and the ~~between~~ poles, are determined to be

$0 < \theta 5 < 180/(5 \cdot Pn)$ and $180/(5 \cdot Pn) \leqq \theta 6 \leqq 180 \times 2/(5 \cdot Pn)$

where a pole pair number is Pn, and

~~the~~ a rotor core section width has points of inflection, the rotor core section width being sandwiched by the peripheral ~~direction~~ edge section of each of the permanent magnets

~~(33)~~ or the first non-magnetic layers ~~(34) continuous or adjacent to the peripheral direction edge section of each permanent magnet (33)~~ and the second non-magnetic layers ~~(35)~~ and the rotor surface,

angles $\theta 7$ and $\theta 8$ between ~~the~~ respective points of inflection and ~~the~~ between poles are determined to be

$$0 < \theta 7 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 8 \leqq 180 \times 2/(7 \cdot Pn)$$

where a pole pair number is Pn, and

~~the~~ a relationship of the angles $\theta 5$, $\theta 6$, $\theta 7$ and $\theta 8$ is determined to be $\theta 7 < \theta 5 < \theta 8 < \theta 6$.

9. (Currently Amended) The rotor ~~A motor~~ as set forth in claim ~~4 or claim 5~~ 8, wherein

the angle $\theta 5$ is $0 < \theta 5 < 180/(5 \cdot Pn)$, the angle $\theta 7$ is $0 < \theta 7 < 180/(7 \cdot Pn)$, the angle $\theta 6$ is the minimum value of $180/(5 \cdot Pn) \leqq \theta 6 \leqq 180 \times 2/(5 \cdot Pn)$, and the angle $\theta 8$ is the minimum value of $180/(7 \cdot Pn) \leqq \theta 8 \leqq 180 \times 2/(7 \cdot Pn)$.

10. (Currently Amended) The rotor ~~A motor~~ as set forth in ~~one of~~ claim 1 ~~through claim 4,~~ wherein

each of the permanent magnets ~~(13)(14)(43)(44)~~ is divided into multiple layers in a radial direction.

11. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 10, wherein

each of the permanent magnets ~~(13)(14)~~ is divided into two layers in a radial direction, and an angle $\theta 3$ between the peripheral ~~direction~~ edge section of the permanent magnet ~~(13)~~

in an inner side of the rotor or ~~the~~ a pole center side edge section of a rotor surface adjacent ~~section~~ each of the first non-magnetic layers ~~continuous or adjacent to the peripheral direction edge section of each permanent magnet (13)~~ and ~~the between~~ the poles, and an angle θ 4 between the peripheral ~~direction~~ edge section of the permanent magnet ~~(14)~~ in an outer side of the rotor or the pole center side edge section of the rotor surface adjacent section of the first non-magnetic layers ~~continuous or adjacent to peripheral direction edge section of the permanent magnet (14)~~ and ~~the between~~ the poles are determined to be

$$0 < \theta 3 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(5 \cdot Pn)$$

or

$$0 < \theta 3 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(7 \cdot Pn)$$

where a pole pair number is Pn.

12. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 11, wherein the angle θ 3 is $0 < \theta 3 < 180/(5 \cdot Pn)$ or $0 < \theta 3 < 180/(7 \cdot Pn)$, and the angle θ 4 is the minimum value of $180/(5 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(5 \cdot Pn)$ or the minimum value of $180/(7 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(7 \cdot Pn)$.

13. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 10, wherein each of the permanent magnets ~~(43)(44)~~ is divided into two layers in a radial direction, and an angle θ 9 between ~~the~~ a pole center side edge section of the rotor surface adjacent ~~section~~ each of the permanent magnets ~~(43)~~ in an inner side of the rotor and ~~the between~~ the poles, and an angle θ 10 between the pole center side edge section of the rotor surface

adjacent ~~section~~ each of the permanent magnets ~~(44)~~ in an outer side of the rotor and ~~the~~ ~~between~~ the poles are determined to be

$$0 < \theta 9 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 10 \leqq 180 \times 2/(5 \cdot Pn)$$

where a pole pair number is Pn,

~~and the~~ a rotor core section width has points of inflection, the rotor core section width being sandwiched by the peripheral ~~direction~~ edge sections of the permanent magnets ~~(43)~~ on the inner side of the rotor or the first non-magnetic layers ~~continuous or adjacent to the peripheral direction edge section of permanent magnet (43)~~ and the peripheral ~~direction~~ edge sections of the permanent magnets ~~(44)~~ on the outer side of the rotor or the first non-magnetic layers ~~continuous or adjacent to the peripheral direction edge section of permanent magnet (44)~~, and

angles θ 11 and θ 12 between ~~the~~ respective points of inflection and ~~the~~ between poles are determined to be

$$0 < \theta 11 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 12 \leqq 180 \times 2/(7 \cdot Pn)$$

where a pole pair number is Pn, and

a relationship of the angles θ 9, θ 10, θ 11 and θ 12 is determined to be $\theta 11 < \theta 9 < \theta 12 < \theta 10$.

14. (Currently Amended) The rotor ~~A motor~~ as set forth in claim 13, wherein

the angle θ 9 is $0 < \theta 9 < 180/(5 \cdot Pn)$, the angle θ 11 is $0 < \theta 11 < 180/(7 \cdot Pn)$, the angle θ 10 is the minimum value of $180/(5 \cdot Pn) \leqq \theta 10 \leqq 180 \times 2/(5 \cdot Pn)$, and the angle θ 12 is the minimum value of $180/(7 \cdot Pn) \leqq \theta 12 \leqq 180 \times 2/(7 \cdot Pn)$.

15. (New) The rotor as set forth in claim 5, wherein

an angle $\theta 1$ between the peripheral edge section of each of the permanent magnets or a pole center side edge section of the rotor surface adjacent each of the first non-magnetic layers and the poles, and an angle $\theta 2$ between the pole center side edge section of the rotor surface adjacent each of the second non-magnetic layers and the poles, are determined to be

$$0 < \theta 1 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(5 \cdot Pn)$$

or

$$0 < \theta 1 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(7 \cdot Pn)$$

where a pole pair number is Pn.

16. (New) The rotor as set forth in claim 15, wherein

the angle $\theta 1$ is $0 < \theta 1 < 180/(5 \cdot Pn)$ or $0 < \theta 1 < 180/(7 \cdot Pn)$, the angle $\theta 2$ is the minimum value of $180/(5 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(5 \cdot Pn)$ or the minimum value of $180/(7 \cdot Pn) \leqq \theta 2 \leqq 180 \times 2/(7 \cdot Pn)$.

17. (New) The rotor as set forth in claim 5, wherein

an angle $\theta 5$ between the peripheral edge section of each of the permanent magnets or a pole center side edge section of the rotor surface adjacent each of the first non-magnetic layers and the poles, and an angle $\theta 6$ between the pole center side edge section of the rotor surface adjacent each of the second non-magnetic layers and the poles, are determined to be

$$0 < \theta 5 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 6 \leqq 180 \times 2/(5 \cdot Pn)$$

where a pole pair number is Pn,

a rotor core section width has points of inflection, the rotor core section width being sandwiched by the peripheral edge section of each of the permanent magnets or ~~each of~~ the first non-magnetic layers and the second non-magnetic layers and the rotor surface,

angles $\theta 7$ and $\theta 8$ between respective points of inflection and between poles are determined to be

$$0 < \theta 7 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 8 \leqq 180 \times 2/(7 \cdot Pn)$$

where a pole pair number is Pn, and

a relationship of the angles $\theta 5$, $\theta 6$, $\theta 7$ and $\theta 8$ is determined to be

$\theta 7 < \theta 5 < \theta 8 < \theta 6$.

18. (New) The rotor as set forth in claim 17, wherein

the angle $\theta 5$ is $0 < \theta 5 < 180/(5 \cdot Pn)$, the angle $\theta 7$ is $0 < \theta 7 < 180/(7 \cdot Pn)$, the angle $\theta 6$ is the minimum value of $180/(5 \cdot Pn) \leqq \theta 6 \leqq 180 \times 2/(5 \cdot Pn)$, and the angle $\theta 8$ is the minimum value of $180/(7 \cdot Pn) \leqq \theta 8 \leqq 180 \times 2/(7 \cdot Pn)$.

19. (New) The rotor as set forth in claim 2 wherein

each of the permanent magnets is divided into multiple layers in a radial direction.

20. (New) The rotor as set forth in claim 19, wherein

each of the permanent magnets is divided into two layers in a radial direction, and an angle $\theta 3$ between the peripheral edge section of the permanent magnet in an inner side of the rotor or a pole center side edge section of the rotor surface adjacent each of the first non-magnetic layers and the poles, and an angle $\theta 4$ between the peripheral edge section of the

permanent magnet in an outer side of the rotor or the pole center side edge section of the rotor surface adjacent each of the first non-magnetic layers and the poles are determined to be

$$0 < \theta 3 < 180/(5 \cdot Pn) \text{ and } 180/(5 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(5 \cdot Pn)$$

or

$$0 < \theta 3 < 180/(7 \cdot Pn) \text{ and } 180/(7 \cdot Pn) \leqq \theta 4 \leqq 180 \times 2/(7 \cdot Pn)$$

where a pole pair number is Pn.